CONTENTS

Volume 4, Issue Nos. 1–4

OPTIMAL CONTROL APPLICATIONS & METHODS

Issue No. 1, January–March 1983

Optimal Open-loop Control of the Mould Filling Process for Injection Moulding Machines: Y. J. Cho, H. S. Cho and C. O. Lee 1

The Game of Two Elliptical Ships: T. Miloh 13

Large Finite Horizon and Infinite Horizon LQ-Optimal Control Problems: J. L. Willems and F. M. Callier 31

The Effects of Mismatch on an Optimal Control Scheme for Linear Systems with Control Time Delays: R. D. Hocken and J. E. Marshall 47

A Formal Theory of Lobbying Behaviour: J. F. Reinganum 71

Reviewers for 1981–1982 85

In Memoriam. Professor Kyuichiro Washizu 93

COMMENT 94

BOOK REVIEWS 96

ANNOUNCEMENT 101

Issue No. 2, April–June 1983

SURVEY PAPER

High-Order Necessary Optimality Conditions for Control Problems with Terminal Constraints: V. V. Gorokhovik 103

On the Solution of the Linear–Quadratic Optimal Control Problem by Extended Invariant Imbedding: F. Breitenecker 129

The Effects of Non-linear Kinematics in Optimal Evasion: I. Forte, A. Steinberg and J. Shinar 139

Optimal Maintenance Policies Under Deterministic Deterioration and Stochastic Failure: G. Feichtinger 153

Decentralized Stochastic Adaptive Nash Games: Y. M. Chan and J. B. Cruz, Jr. 163

Indexed or abstracted by 'Current Contents' and other leading Indexing/Abstracting Services.

SHORT COMMUNICATIONS

Deterministic and Stochastic Optimization of a Dynamic Advertising Model: S. P. Sethi 179

Optimal Forest Fire Control with Limited Reinforcements: M. Parlar 185

Aeroelastic Optimization of Orthotropic Rectangular Flat Panels: L. Librescu and L. Beiner 193

BOOK REVIEWS 199

ANNOUNCEMENT 203

Issue No. 3, July–September 1983

Robust and Well-conditioned Eigenstructure Assignment via Sylvester's Equation: R. K. Cavin, III and S. P. Bhattacharyya 205

Minimum Energy Control of Time-delay Systems via Walsh Functions: K. R. Palanisamy and G. P. Rao 213

National Welfare Versus 'Economic Independence': The Case of Iran: H. Razavi . . . 227

Numerical Solution of the Symmetric Riccati Equation Through Riccati Iteration: L. R. Anderson, D. W. Brewer and A. R. Baykan 239

Output Feedback Pole Assignment Under System Variation: G. K. F. Lee and L. F. Godbout, Jr. 253

SHORT COMMUNICATIONS

An Incentive-compatible Modification of the Heal Algorithm: L. D. Servi and Y. C. Ho 265

Optimal Control of a Diffusion Model of New Product Acceptance with Price-dependent Total Market Potential: S. Jørgensen 269

COMMENT 277

BOOK REVIEW 279

Issue No. 4, October–December 1983

Special Issue Dedicated to ANGELO MIELE

Dedication and Introduction 281

Solution Algorithms for Non-linear Singularly Perturbed Optimal Control: M. D. Ardema 283

An Explicit Feedback Approximation for Medium-range Interceptions in a Vertical Plane: J. Shinar and M. Negrin 303

Optimal Pulse Motor Control: A. J. Calise and S. Smith 325

A Note on Avoidance Control: G. Leitmann and J. Skowronski 335

A Navigation Algorithm Using Measurement-Based Extrapolation: A. R. Stubberud . 343

Minimum Horizontal Rotations: C. Marchal 357

Globally Optimal Control of Self-adjoint Distributed Systems: L. Meirovitch and L. M. Silverberg 365

Optimal Structural Design and Relaxed Controls: K. A. Lurie and A. V. Cherkaev . . 387

The Asymptotic Π-Test for Singular Periodic Control Problems with an Application to the Management of a Class of Ecosystems: G. Guardabassi and R. Scattolini . . . 393

An Integrated Approach to Reduced-order Control Theory: P. T. Kabamba and R. W. Longman 405

Author Index 417

Key Word Index 419